the same tensile strength and elongation at break characteristics as noted above, however, are potentially available within the inventive coating formulation and thus on the inventive coated airbag cushion. In order to provide the desired leak-down times at long-term storage, however, the add-on weights of other available elastomers may be greater than others. However, the upper limit of 3.0 ounces per square yard should not be exceeded to meet this invention. The desired elastomers may be added in multiple layers if desired as long the required thickness for the overall coating is not exceeded. Alternatively, the multiple layer coating system may also be utilized as long as at least one elastomer possessing the desired tensile strength and elongation at break is utilized.--

The paragraph beginning on line 5 of page 13 has been amended to read as follows:

--Other possible components present within the elastomer coating composition are thickeners, antioxidants, flame retardants, coalescent agents, adhesion promoters, and colorants. In accordance with the potentially preferred practices of the present invention, a dispersion (either solvent- or water-borne, depending on the selected elastomer) of finely divided elastomeric resin is compounded, or present in a resin solution, with a thickener and a flame retardant to yield a compounded mix having a viscosity of about 8000 centipoise or greater. A polyurethane is potentially preferred, with a polycarbonate polyurethane, such as those noted above from Bayer and Stahl, most preferred. Other potential elastomeric resins include other polyurethanes, such as WITCOBOND™ 253 (35% solids), from Witco, and SANCURE®, from BFGoodrich, Cleveland, Ohio; hydrogenated NBR, such as CHEMISAT™ LCH-7335X (40% solids), from Goodyear Chemical, Akron, Ohio; EPDM, such as EP-603A rubber latex, from Lord Corporation, Erie, Pennsylvania; butyl rubber, such as Butyl rubber latex BL-100, from

Lord Corporation; and acrylic rubber (elastomers), such as HYCAR™, from BFGoodrich. This list should not be understood as being all-inclusive, only exemplary of potential elastomers. Furthermore, the preferred elastomer will not include any silicone, due to the extremely low tensile strength (typically below about 1,500 psi) characteristics exhibited by such materials. However, in order to provide effective aging and non-blocking benefits, such components may be applied to the elastomeric composition as a topcoat as long as the add-on weight of the entire elastomer and topcoat does not exceed 3.0 ounces per square yard and the amount of silicone within the entire elastomer composition does not exceed 20% by weight. Additionally, certain elastomers comprising polyester or polyether segments or other similar components, may not be undesirable, particularly at very low add-on weights (i.e., 0.8-1.2 oz/yd^2) due to stability problems in heat and humidity aging (polyesters easily hydrolyze in humidity and polyethers easily oxidize in heat); however, such elastomers may be utilized in higher add-on amounts as long, again, as the 3.0 ounces per square yard is not exceeded.

The paragraph beginning on line 9 of page 14 has been amended to read as follows:

--Among the other additives particularly preferred within this elastomer composition are heat stabilizers, flame retardants, primer adhesives, and materials for protective topcoats. A potentially preferred thickener is marketed under the trade designation NATROSOL™ 250 HHXR by the Aqualon division of Hercules Corporation which is believed to have a place of business at Wilmington, Delaware. In order to meet Federal Motor Vehicle Safety Standard 302 flame retardant requirements for the automotive industry, a flame retardant is also preferably added to the compounded mix. One potentially preferred flame retardant is AMSPERSE® F/R 51 marketed by Amspec Chemical Corporation which is believed to have a place of business at

Gloucester City New Jersey. Primer adhesives may be utilized to facilitate adhesion between the surface of the target fabric and the elastomer itself. Thus, although it is preferable for the elastomer to be the sole component of the entire elastomer composition in contact with the fabric surface, it is possible to utilize adhesion promoters, such as isocyanates, epoxies, functional silanes, and other such resins with adhesive properties, without deleteriously effecting the ability of the elastomer to provide the desired low permeability for the target airbag cushion. A topcoat component, as with potential silicones, as noted above, may also be utilized to effectuate proper non-blocking characteristics to the target airbag cushion. Such a topcoat may perform various functions, including, but not limited to, improving aging of the elastomer (such as with silicone) or providing blocking resistance due to the adhesive nature of the coating materials (most noticeably with the preferred polyurethane polycarbonates).

The paragraph beginning on line 1 of page 16 has been amended to read as follows:

--Two other tests which the specific coated airbag cushion must pass are the oven (heat) aging and humidity aging tests. Such tests also simulate the storage of an airbag fabric over a long period of time upon exposure at high temperatures and at relatively high humidities. These tests are actually used to analyze alterations of various different fabric properties after such a prolonged storage in a hot ventilated oven (>100°C) (with or without humid conditions) for 2 or more weeks. For the purposes of this invention, this test was used basically to analyze the air permeability of the coated side curtain airbag by measuring the characteristic leak-down time (as discussed above, in detail). The initially produced and stored inventive airbag cushion should exhibit a characteristic leak-down time of greater than about 5 seconds (upon re-inflation at 10 psi gas pressure after the bag had previously been inflated to a peak pressure above about 15 psi

and allowed to fully deflate) under such harsh storage conditions. Since polyurethanes, the preferred elastomers in this invention, may be deleteriously affected by high heat and humidity (though not as deleteriously as certain polyester and polyether-containing elastomers), it may be prudent to add certain components within a topcoat layer and/or within the elastomer itself. Antioxidants, antidegradants, and metal deactivators may be utilized for this purpose. Examples include, and are not intended to be limited to, IRGANOX® 1010 and IRGANOX® 565, both available from CIBA Specialty Chemicals. This topcoat may also provide additional protection against aging and thus may include topcoat aging improvement materials, such as, and not limited to, polyamides, NBR rubbers, EPDM rubbers, and the like, as long as the elastomer composition (including the topcoat) does not exceed the 3.0 ounces per square yard (preferably much less than that, about 1.5 at the most) of the add-on weight to the target fabric.--

The paragraph beginning on line 1 of page 19 has been amended to read as follows:

--Recently, a move has been made away from both the multiple-piece side curtain airbags (which require great amounts of labor-intensive sewing to attached woven fabric blanks) and the traditionally produced one-piece woven cushions, to more specific one-piece woven fabrics which exhibit substantially reduced floats between woven yarns to substantially reduce the unbalanced shifting of yarns upon inflation, such as in Ser. No. 09/406,264, now U.S. Pat. No. 6,220,309, and 09/668,857, both to Sollars, Jr., the specifications of which are completely incorporated herein and described in greater depth hereafter:--

The paragraph beginning on line 12 of page 22 has been amended to read as follows:

--As noted above, coatings should be applied to the surface as a necessary supplement to reduce the air permeability of the inventive fabric. Since one preferred ultimate use of this inventive fabric is as a side curtain airbag which must maintain a very low degree of air permeability throughout a collision event (such as a rollover where the curtain must protect passengers for an appreciable amount of time), a decrease in permitted air permeability is highly desirable. With such a specific weaving pattern within the inventive inflatable fabric, lower amounts of coatings are permissible (as compared to other standard additions of such materials) to provide desired low inflation gas permeability. Any standard coating or laminate film, such as a silicone, polyurethane, polyamide, polyester, rubber (such as neoprene, for example), and the like, as discussed above, may be utilized for this purpose and may be applied in any standard method and in any standard amount on the fabric surface. However, the necessary amount of such a coating (or layers of coatings or laminate film or layer of laminate films) required to provide the desired low permeability is extremely low and is discussed in greater depth above. Again, the particular weave structures of the inventive inflatable fabric permits the utilization of such low coating amounts to provide the desired low permeability characteristics.--

The paragraph beginning on line 12 of page 24 has been amended to read as follows:

--Additionally, it has also been found that the inventive coating compositions, at the inventive add-on amounts, etc., provide the same types of benefits with the aforementioned sewn, stitched, etc., side curtain airbags. Although such structures are highly undesirable due to the high potential for leakage at these attachment seams, it has been found that the inventive coating provides a substantial reduction in permeability (to acceptable leak-down time levels, in fact)

with correlative lower add-on amounts than with standard silicone and neoprene rubber coating formulations. Such add-on amounts will approach the 3.0 ounces per square yard, but lower amounts have proven effective (1.5 ounces per square yard, for example) depending on the utilization of a sufficiently high tensile strength and sufficiently stretchable elastomeric component within the coating composition directly in contact with the target fabric surface. Again, with the ability to reduce the amount of coating materials (which are generally always quite expensive), while simultaneously providing a substantial reduction in permeability to the target airbag structure, as well as high resistance to humidity and extremely effective aging stability, the inventive coating composition, and the inventive coated airbag itself is clearly a vast improvement over the prior airbag coating art.

IN THE CLAIMS:

14.(Amended) The airbag cushion of Claim 12, wherein said polyamide yarns are multifilament yarns exhibiting a linear density of about 210-840 denier.

15.(Amended) The airbag cushion of Claim 14, wherein said multifilament yarns exhibit a filament linear density of about 4 denier per filament or less.

29.(Amended) The airbag cushion of Claim 27, wherein said polyamide yarns are multifilament yarns exhibiting a linear density of about 210-630 denier.

30.(Amended) The airbag cushion of Claim 28, wherein said multifilament yarns exhibit a filament linear density of about 4 denier per filament or less.